

PATENT

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In the Claims

Please amend Claim 1 as set forth in the Complete Listing of Claims below:

Complete Listing of Claims

Claim 1 (currently amended): A method for manufacturing a semiconductor device using an oxide sacrificial material, comprising the step of etching the oxide sacrificial material using by immersing the semiconductor device into an etching solution comprising hydrofluoric acid (HF) and sulfuric acid (H_2SO_4) in a ratio HF: H_2SO_4 ranging from 1:1 to 3:1

Claim 2 (original): The method of Claim 1 wherein the semiconductor device comprises a plurality of deposited and patterned layers, including at least one polysilicon layer.

Claim 3 (original): The method of Claim 2 wherein at least one of the plurality of deposited and patterned layers is a metal layer comprising aluminum.

Claim 4 (original): The method of Claim 3 wherein the etching solution has an etch selectivity for the oxide sacrificial material relative to the metal layer of greater than 100.

Claim 5 (original): The method of Claim 1 wherein the semiconductor device comprises a micromechanical device, a microelectromechanical device or a microfluidic device.

Claim 6 (original): The method of Claim 1 wherein the step of etching the oxide sacrificial material is performed with the etching solution at a temperature in the range of 5 - 70 °C.

Claim 7 (original): The method of Claim 1 wherein the hydrofluoric acid comprises a "semiconductor grade" hydrofluoric acid, and the sulfuric acid comprises a "semiconductor grade" sulfuric acid.

Claim 8 (original): The method of Claim 1 wherein the hydrofluoric acid comprises at least 40 - 50% by weight HF.

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Claim 9 (original): The method of Claim 1 wherein the sulfuric acid comprises at least 90% by weight H₂SO₄.

Claim 10 (cancelled)

Claims 11 - 18 (withdrawn)